

GLOSSARY

Actual contamination: A target exposed to hazardous substances based on analytical data or through direct observation.

Apportioned population: In the evaluation of drinking water target populations associated with a blended system, the portion of the population evaluated as being served by an individual well or intake within the system.

Aquifer: Rock or sediment that is saturated and sufficiently permeable to transmit economic quantities of water to wells and springs. Not all ground water is in an aquifer.

Background: The natural ambient concentration of a hazardous substance. Includes both naturally occurring concentrations and concentrations from human-made sources other than the site being evaluated.

Blended system: A drinking water supply system that can or does combine (e.g., via connecting valves) water from more than one well or surface water intake, or from a combination of wells and intakes.

Computer-Aided Data Review and Evaluation (CADRE): A PC based software program designed to aid the analytical data review for CLP RAS data according to the QC criteria defined in EPA's *Laboratory Data Validation Functional Guidelines for Evaluating Organic Analyses*.

CERCLA Information System (CERCLIS): EPA's computerized inventory and tracking system for potential hazardous waste sites.

CLP Analytical Results Database (CARD): A national database designed to store and integrate CLP results and QA/QC data. CARD consists of Superfund chemical analysis and analytical information on hazardous waste sites. Analytical data entered into CARD can be downloaded into electronic software applications, such as CADRE.

Coastal tidal waters: Surface water body type that includes embayments, harbors, sounds, estuaries, and back bays. Such water bodies are in the interval seaward from the mouths of rivers and landward from the 12-mile baseline marking the transition to the ocean water body type.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA): Legislation that established the Federal Superfund for response to uncontrolled releases of hazardous substances to the environment.

Contaminated soil: Soil onto which available evidence indicates that a hazardous substance was spilled, spread, disposed, or deposited.

Contract Laboratory Program (CLP): A nationwide network of commercial laboratories under contract to EPA that provides analytical data of known and documented quality for Superfund enforcement actions. The CLP consists of routine and non-routine standardized analytical procedures and associated quality control requirements managed under a broad quality assurance program, which includes sample projections, sample scheduling, chain-of-custody requirements, reporting and documentation requirements, audits, and data evaluations.

Data Quality Objectives (DQOs): The full set of qualitative and quantitative constraints needed to specify the level of uncertainty that a manager can accept when making a decision based on data. The DQO process is a planning tool that enables the site manager to specify the quality of the data (analytical methods and services to be used) required to support the objectives of the site investigation.

Data Use Categories (DUCs): A level of data quality defined by a specific combination of method, QA/QC, documentation, and review requirements.

Depth to aquifer: The vertical distance between the lowest known point of hazardous substances to the top of the aquifer being evaluated.

Distance to surface water: The shortest distance that overland runoff would follow from a source to surface water.

Drinking water population: The number of residents, workers, and students who drink water drawn from wells or surface water intakes located within target distance limits.

Drums: Portable containers designed to hold a standard 55-gallon volume of wastes.

Emergency response: An action taken to eliminate, control, or otherwise mitigate a threat posed to the public health or environment due to release or threatened release of a hazardous substance. Removals are relatively short-term actions to respond to situations requiring immediate action.

Factor: The basic element of the HRS requiring data collection and evaluation to assign a score.

Factor category: A set of related HRS factors. Each HRS pathway consists of three factor categories—likelihood of release or exposure, targets, and waste characteristics.

Field Analytical Support Project (FASP): Field sampling techniques designed to provide sample screening information during the field activities and provide real-time analytical data. Sample analysis is performed from a field base, mobile laboratory, or with portable instruments.

Federal Register (FR): Daily publication of the Government Printing Office; contains public notices, rules, and regulations issued by the Federal Government. Cited as “<volume> FR <page>.”

Fishery: An area of a surface water body from which food chain organisms are taken or could be taken for human consumption on a subsistence, recreational, or commercial basis. Food chain organisms include fish, shellfish, crustaceans, amphibians, and amphibious reptiles.

Geographical Exposure Modeling System (GEMS): Population database maintained by EPA’s Office of Toxic Substances that provides residential populations in specified distance categories around a point location.

Hazard Ranking System (HRS): Scoring system used by EPA to assess the relative threat associated with actual or potential releases of hazardous substances at sites. The HRS is the primary way of determining whether a site is to be included on the NPL.

Hazardous constituent: Hazardous substance.

Hazardous substance: Material defined as a hazardous substance, pollutant, or contaminant in CERCLA Sections 101(14) and 101(33).

Hazardous waste: Any material containing a hazardous substance, pollutant, or contaminant that is or was in a source.

Investigation-derived wastes (IDW): Wastes generated during the process of collecting samples during CERCLA investigations that must be handled according to all applicable or relevant and appropriate requirements. These wastes include soil, ground water, used personal protective equipment, decontamination fluids, and disposable sampling equipment.

Karst: A kind of terrain with characteristics of relief and drainage arising from a high degree of rock solubility. The majority of karst conditions occur in limestone areas, but karst may also occur in areas of dolomite, gypsum, or salt deposits. Features associated with karst terrain may include irregular topography, abrupt ridges, sinkholes, caverns, abundant springs, disappearing streams, and the lack of a well-developed surface drainage system of tributaries and streams.

Lake: A type of surface water body that includes:

- Natural and artificially-made lakes or ponds that lie along rivers or streams (but excluding the Great Lakes).
- Isolated but perennial lakes, ponds, and wetlands.
- Static water channels or oxbow lakes contiguous to streams or rivers.
- Streams or small rivers, without diking, that merge into surrounding perennially-inundated wetlands.
- Wetlands contiguous to water bodies defined as lakes are considered to be part of the lake.

Landfill: An engineered (by excavation or construction) or natural hole in the ground into which wastes have been disposed by backfilling or contemporaneous soil deposition with waste disposal.

Land treatment: Landfarming or other land treatment method of waste management in which liquid wastes or sludges are spread over land and tilled, or liquids are injected at shallow depths into soils.

National Contingency Plan (NCP): National Oil and Hazardous Substances Pollution Contingency Plan, commonly known as the National Contingency Plan. Regulation that establishes roles, responsibilities, and authorities for responding to hazardous substance releases. The NCP established the HRS as the principal mechanism for placing sites on the NPL.

National Priorities List (NPL): Under the Superfund program, the list of sites with releases and potential releases of hazardous substances, pollutants, and contaminants that appear to pose the greatest threat to public health, welfare, and the environment.

No Further Remedial Action Planned (NFRAP): Site disposition decision that no further response under the Federal Superfund program is necessary. Replaced by "Site Evaluation Accomplished" (SEA) recommendation.

Non-CLP Analytical Services: Analytical activities procured outside of the Contract Laboratory Program (CLP). Non-CLP data are data that are generated using non-CLP analytical services and are not produced under the CLP's quality assurance program. Non-CLP data can be generated by laboratories that participate in the CLP, by CLP Statement of Work analytical methods, and may even be presented to the user in CLP deliverable format. However, if the analytical services were not obtained through the CLP/Regional Sample Control Center (RSCC) route, they are considered to be non-CLP analytical services.

No suspected release: A professional judgment PA conclusion based on site and pathway conditions that a hazardous substance is not likely to have been released to the environment. (No suspected release is the PA terminology analogous to the HRS potential to release.)

Observed contamination: The evaluation of a release of a hazardous substance to the ground surface based on analytical data appropriate for the soil exposure pathway.

Observed release: The evaluation of a release of a hazardous substance to the environment based on analytical data of the migration pathway or direct observation of the release into the migration pathway media.

Ocean: A type of surface water body that includes:

- Ocean areas seaward from a baseline distance of 12 miles from shore.
- The Great Lakes, including wetlands contiguous to them.

PA-Score: EPA's computer program that automates scoring sites during the PA.

Pathway: The environmental medium through which a hazardous substance may threaten targets. The HRS evaluates the migration and threat potential through the ground water, surface water, air, and soil exposure pathways.

Pile: Any non-containerized accumulation above the ground surface of solid, non-flowing wastes; includes open dumps. Some types of piles are:

Chemical Waste Pile—consists primarily of discarded chemical products, by-products, radioactive wastes, or used or unused feedstocks

Scrap Metal or Junk Pile—consists primarily of scrap metal or discarded durable goods, such as appliances, automobiles, auto parts, or batteries, composed of materials that contain or have contained a hazardous substance

Tailings Pile—consists primarily of any combination of overburden from a mining operation and tailings from a mineral mining, beneficiation, or processing operation

Trash Pile—consists primarily of paper, garbage, or discarded non-durable goods that contain or have contained a hazardous substance

Potential contamination: A target located within the target distance limit that is subject to a potential release of hazardous substances from the site or for which no actual contamination has been established.

Preliminary Assessment (PA): Initial stage of site assessment under Superfund; designed to distinguish between sites that pose little or no threat to human health and the environment and sites that require further investigation.

PREscore: EPA's computer program that automates scoring sites according to the HRS.

Primary target: A target, based on professional judgment of site and pathway conditions and target characteristics known at the PA, that has a relatively high likelihood of exposure to a hazardous substance. (Primary target is the PA terminology analogous to an HRS target exposed to actual contamination.)

Probable Point of Entry (PPE): The point at which overland runoff from the site most likely enters surface water.

Quality Assurance/Quality Control (QA/QC): Planned, systematic procedures or methods to provide a high degree of confidence in the quality of work products or laboratory results.

Removal: An action taken to eliminate, control, or otherwise mitigate a threat posed to the public health or environment due to release or threatened release of a hazardous substance. Removals are relatively short-term actions to respond to situations requiring immediate action.

Resident: A person whose place of residence (full or part-time) is within the target distance limit.

Resident individual: Under the soil exposure pathway, a person living or attending school or day care on a property with observed contamination and within 200 feet of an area of observed contamination associated with the site.

Resident population: Under the soil exposure pathway, the number of residents and students on a property with observed contamination and within 200 feet of an area of observed contamination associated with the site.

Resource Conservation and Recovery Act of 1976 (RCRA): Legislation that established cradle-to-grave accountability for hazardous wastes, from point of generation to point of ultimate disposal.

Routine Analytical Services (RAS): Standardized CLP laboratory services that provide analyses of organic and inorganic compounds in water or solid samples.

Secondary target: A target, based on professional judgement of site and pathway conditions and target characteristics known at the PA, that has a relatively low likelihood of exposure to a hazardous substance. (Secondary target is the PA terminology analogous to an HRS target exposed to potential contamination.)

Sensitive environment: A terrestrial or aquatic resource, fragile natural setting, or other area with unique or highly-valued environmental or cultural features.

Site: The area consisting of the aggregation of sources, the areas between sources, and areas that may have been contaminated due to migration from sources; site boundaries are independent of property boundaries.

Site Evaluation Accomplished (SEA): Site disposition decision that no further response under the Federal Superfund program is necessary. A SEA recommendation denotes that EPA has completed its assessment at a site and has determined that no further steps to list the site on the NPL need to be taken unless information indicating that this decision was not appropriate make a recommendation for listing appropriate at a later time. The SEA recommendation replaced the "No Further Remedial Action Planned" (NFRAP) recommendation (see Henry Longest Memorandum, May 11, 1992).

Site Inspection (SI): The second stage of site assessment under Superfund. SIs are performed at sites that receive a further action recommendation after the PA, and build on PA information. SIs typically include sampling to identify hazardous substances, releases, and targets exposed to actual contamination and help characterize sites that pose the greatest threats to human health and the environment.

Source: An area where a hazardous substance may have been deposited, stored, disposed, or placed. Also, soil that may have become contaminated as a result of hazardous substance migration. In general, however, the volumes of air, ground water, surface water, and surface water sediments that may have become contaminated through migration are not considered sources.

Special Analytical Services (SAS): Nonstandardized laboratory services that provide analyses for organics, inorganics, dioxin, and other compounds in a variety of matrices. SAS analyses need to be scheduled on an as-needed basis.

Standard Operating Procedures (SOPs): Established Regional, State or contractor procedures approved by EPA to address non-site specific investigation activities and issues. These procedures cover topics such as sampling protocols, chain-of-custody requirements, and quality assurance sampling requirements.

Stream flow: The average rate of flow of a water body, expressed in cubic feet per second (cfs).

Stream or river: A type of surface water body that includes:

- Perennially-flowing waters from point of origin to the ocean or to coastal tidal waters, whichever comes first, and wetlands contiguous to these flowing waters.
- Aboveground portions of disappearing rivers. Artificially-made ditches, only insofar as they perennially flow into other surface water.
- Intermittently-flowing waters and contiguous intermittently-flowing ditches in areas where mean annual precipitation is less than 20 inches.

Student: A full- or part-time attendee of an educational institution or day care facility located within the target distance limit.

Superfund Accelerated Cleanup Model (SACM) A process for streamlining Superfund cleanups. The site assessment activities under SACM integrate elements of removal assessments, site assessments (PA/SI), remedial investigations (RI), and risk assessments; these are conducted concurrently where appropriate or advisable.

Superfund Amendments and Reauthorization Act of 1986 (SARA): Legislation which extended the Federal Superfund program and mandated revisions to the HRS.

Superfund Chemical Data Matrix (SCDM): EPA's database of hazardous substances and their chemical characteristics (such as toxicity, mobility, persistence) and media-specific benchmark concentrations.

Surface impoundment: A topographic depression, excavation, or diked area, primarily formed from earthen materials (lined or unlined) and designed to hold accumulated liquid wastes, wastes containing free liquids, or sludges that were not backfilled or otherwise covered during periods of deposition. A depression may be dry if deposited liquid has evaporated, volatilized, or leached or wet with exposed liquid. Structures that may be more specifically described as lagoon pond, aeration pit, settling pond, tailings pond, sludge pit, etc. Also a surface impoundment that has been covered with soil after the final deposition of waste materials (i.e., buried or backfilled).

Surface water: A naturally-occurring, perennial water body; also, some artificially made and intermittently flowing water bodies.

Suspected release: A professional judgement PA conclusion based on site and pathway conditions that a hazardous substance is likely to have been released to the environment. Suspected release is the PA terminology analogous to an HRS observed release.

Tanks and non-drum containers: Any stationary device designed to contain accumulated wastes and constructed primarily of fabricated materials (such as wood, concrete, steel, or plastic) that provide structural support; any portable or mobile device in which waste is stored or otherwise handled.

Target: A receptor that is within the target distance limit for a particular pathway. Targets include wells and surface water intakes supplying drinking water, populations, human food chain organisms, sensitive environments, wellhead protection areas, and resources.

Target Analyte List (TAL): The list of inorganic analytes that is specified in the CLP Statement of Work for inorganics analysis.

Target Compound List (TCL): The list of organic compounds that is specified in the CLP Statement of Work for organics analysis.

Target distance limit: The distance over which the HRS evaluates targets. Target distance limits vary by pathway: ground water and air pathways—a 4-mile radius around site sources; surface water pathway—15 miles downstream from the probable point of entry to surface water; soil exposure pathway—200 feet (for the resident population threat) and 1 mile (for the nearby population threat) from areas of observed contamination.

Terrestrial sensitive environment A terrestrial resource, fragile natural setting, or other area with unique or highly valued environmental or cultural features.

Water body type: Classification of a surface water body. Water body types include: streams and rivers; lakes; oceans (includes the Great Lakes); and coastal tidal waters. See the specific definition of each water body type for more detail.

Wetland: A type of sensitive environment characterized as an area that is sufficiently inundated or saturated by surface or ground water to support vegetation adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Worker: In the soil exposure pathway, a person who is employed on a full- or part-time basis and whose workplace is within 200 feet of observed contamination. In the migration pathways, a person whose place of employment is within the target distance limit.